

## CLAIMS

1. A method of generating downlink power information for a multi-sector base transceiver site in which power can be shared between the sectors, the method comprising the steps:  
gathering downlink power information for each sector;  
modifying the gathered downlink power information; and  
forwarding the modified downlink power information to a radio resource manager controlling the multi-sector base transceiver site.
2. The method as claimed in claim 1 wherein the step of modifying the gathered downlink power information is carried out on the downlink power information for one or more of the sectors.
3. The method as claimed in any preceding claim wherein the modification carried out in the step of modifying the gathered downlink power information depends on the relative magnitude of the total gathered power and the available power of the multi-sector base transceiver site.
4. The method as claimed in any preceding claim wherein the step of modifying the gathered downlink power information results in the allocation by the radio resource manager of spare capacity from lightly loaded sectors to more heavily loaded sectors.
5. The method as claimed in any preceding claim, wherein the step of modifying the gathered downlink power results in the amount of spare capacity allocated to a sector being related to the degree of loading or overloading of the sector.

6. The method as claimed in claim 4 or 5 wherein the evaluation of respective loading on sectors is determined with regard to information relating to the loading of the sector determined by a multi-band filter.
7. The method as claimed in any preceding claim wherein the step of modifying the gathered downlink power information results in the modified power information for a more heavily loaded sector being less than the modified power information of a less heavily loaded sector.
8. The method as claimed in any preceding claim wherein the step of modifying gathered downlink power information results in the sum of the reported powers for the sectors becoming greater than the sum of the gathered powers for the sectors, if the sum of the gathered powers is greater than a threshold power.
9. The method as claimed in claim 8 wherein the threshold power is determined by the total power available to the base transceiver site.
10. The method as claimed in any preceding claim wherein average loading and/or variance power requirements information is used in determining modify the gathered power information.
11. The method as claimed in claim 10 wherein average load and/or variance information is obtained from multi-band filters applied to the gathered power requirements.
12. A storage medium storing processor-implementable instructions for carrying out the method as claimed in any preceding claim.

13. Apparatus for generating downlink power information for a multi-sector base transceiver site in which power can be shared between the sectors, the apparatus comprising  
power scaling module for modifying gathered downlink power information and forwarding the modified downlink power information to a radio resource manager controlling the multi-sector base transceiver site.
14. The apparatus as claimed in claim 13 further comprising power measurement module for gathering downlink power information.
15. The apparatus as claimed in claim 13 or 14 further comprising an overload control module operably coupled to the power scaling module, wherein the thresholds used by the overload control to determine an overload in one or more sectors depend at least partly on the modified downlink power information.
16. A base station for a cellular communication system comprising the apparatus as claimed in one of claims 13-15.